

Course ID:	Course Title:	Fall 2018			
Phy111	Mechanics	Prerequisite: Pure Math 30 (Physics 30 recommended)			
		Credits: 3			

Class Information			Instructor Information	Important Dates		
Days:	Tuesday- Thursday	Instructor:	Dr. Mehdi (Nader) Dehghany	First day of classes:	Wed., Sept 5	
Time:	8:15-9:30 am	Email:	Mehdi.dehghany@ambrose.edu	Last day to add/drop, or change to audit:	Sun, Sept 16	
Room:	A1015	Phone:		Last day to request revised exam:	Mon, Oct 22	
Lab/	Monday 8:00-11:00am	Office:	L2091	Last day to withdraw from course:	Mon, Nov 12	
Tutorial:	1085-2	Office Hours:	Thursdays – 9:30 to 10:00 am	Last day to apply for coursework extension:	Mon, Nov 19	
Final Exam:	Dec.15 <sup>th</sup> , 1-4 pm Room: Airhart			Last day of classes:	Tue, Dec 11	

### **Course Description**

This course teaches concepts in motion and kinematics, forces and acceleration, energy, momentum, and torque. There is a lab component for this course.

# **Expected Learning Outcomes**

This course introduces Newtonian point mechanics. Vectors, motion in one and two dimensions including projectile and circular motion are discussed in detail. Newtons laws of motion, forces, the concepts of work and energy, impulse and momentum plus torque are covered. Both conceptual understanding and problem-solving skills will be emphasized. Calculus will not be used, but extensive use will be made of algebra and trigonometry. Tutorial exercises provide further insight into these topics.

# **Textbooks**

Physics for scientists and Engineers: A strategic approach, custom edition for Ambrose University, by Randall D. Knight (Pearson 2016) – Available from bookstore.

### **Course Schedule**

Chapter One: Sections 1, 2, 3, 4, 6, 7, 8

Chapter Three: Sections 1, 2, 3

More chapters will be populated later.

Chapter Two: Sections 1, 2 (No derivatives), 3 (No intergrals), 4, 5

Chapter Four: Section 2

### Requirements:

Online Assignment	10%
Tutorials	10%
Midterm Exam (Monday, October 29nd – 8:30 am – 10:00 am)	35%
Final Exam (Exam period - 3 hours)	45%

**Online Assignments:** In this course, you will receive online assignment based on the book chapters covered, course notes and class discussions, <u>from Moodle website</u>. Each time an online assignment is available, you will receive an e-mail from your instructor. Online assignments are due Saturday nights at 11:59 pm.

**Tutorials:** Three questions/problems are assigned to be tackled during tutorial. Your work will be collected at the end, marked and returned back to you. This could be done individually or in group of two. There will be a Teaching assistant who will be also available during this time to help you with the questions.

**Midterm Exam:** 50% mark of the midterm exam will be from the examples in chapters and end of the chapter questions/problems. Thus, it is strongly recommended to read the text book and practice questions at the end of each chapter on a regular plan. A sample exam will be posted on the <u>Moodle course website</u> later.

**Final Exam:** The final exam is cumulative. It will be on December 15<sup>th</sup> from 1 to 4 pm. Deferred exams will only be granted once full documentation (see the current Ambrose University Calendar) has been received and verified by the Department. Students must ensure they are available for the final exam. Vacations, flights, employment, etc. are not valid reasons to request a deferred examination.

#### Attendance:

Attendance is not recorded neither for lectures nor for tutorials. However, is strongly encouraged since a key component to your course understanding. This is developed by reading required textbook, participating in class and discussions. If you are having trouble with something in particular, don't hesitate to ask question. If you are not in class both physically and mentally, you are missing out on your learning. Class participation is very important to your learning in this course. Students who do not attend class may fall behind the class and topics. Please be aware that you are responsible for your own progress. Physics is not a spectator sport, it is something that must be actively learned.

### **Grade Summary:**

The available letters for course grades are as follows:

<u>Letter Grade</u>	<u>Description</u>								
A+ A	Excellent								
A-	Excellent								
B+		95-100	(A+)	77-79	(B+)	67-69	(C+)	55-59	(D+)
В В-	Good	85-94	(A)	73-76	(B)	63-66	(C)	50-54	(D)
C+		80-84	(A-)	70-72	(B-)	60-62	(C-)	0-49	(F)
C	Satisfactory	80-84	(A-)	10-12	(D-)	00-02	(0-)	0-49	( <b>1</b> ')
C- D+									
D.	Minimal Pass								
F	Failure								

### Other:

All types of calculators can be used in this course, but a simple one that includes basic mathematical functions (addition, subtraction, multiplication, division, trigonometric functions, square root) will suffice. Using cell phone, laptop or ipad during examinations is not permitted even if only used as a calculator. A formula sheet will be uploaded on the course website to guide you through the course. You will receive this formula sheet along with your question sheets for both exams.

Because of the nature of the Alpha 4.00 system, there can be no uniform University-wide conversion scale. The relationship between raw scores (e.g. percentages) and the resultant letter grade will depend on the nature of the course and the instructor's assessment of the level of each class, compared to similar classes taught previously.

Please note that final grades will be available on student registration system. Printed grade sheets are not mailed out.

# **Ambrose University Academic Policies:**

#### Communication

All students have received an Ambrose e-mail account upon registration. It is the student's responsibility to check this account regularly as the Ambrose email system will be the professor's instrument for notifying students of important matters (cancelled class sessions, extensions, requested appointments, etc.) between class sessions. If students do not wish to use their Ambrose accounts, they will need to forward all messages from the Ambrose account to another personal account.

# Registration

During the **Registration Revision Period** students may enter a course without permission, change the designation of any class from credit to audit and /or voluntary withdraw from a course without financial or academic penalty or record. Courses should be added or dropped on the student portal by the deadline date; please consult the List of Important Dates. After that date, the original status remains and the student is responsible for related fees.

Students intending to withdraw from a course after the Registration Revision Period must apply to the Office of the Registrar by submitting a "Request to Withdraw from a Course" form or by sending an email to the Registrar's Office by the **Withdrawal Deadline**; please consult the List of Important Dates on the my.ambrose.edu website. Students will not receive a tuition refund for courses from which they withdraw after the Registration Revision period. A grade of "W" will appear on their transcript.

Students wishing to withdraw from a course, but who fail to do so by the applicable date, will receive the grade earned in accordance with the course syllabus. A student obliged to withdraw from a course after the Withdrawal Deadline because of health or other reasons may apply to the Registrar for special consideration.

### **Exam Scheduling**

Students, who find a conflict in their exam schedule must submit a Revised Examination Request form to the Registrar's Office by the deadline date; please consult the List of Important Dates. Requests will be considered for the following reasons only: 1) the scheduled final examination slot conflicts with another exam; 2) the student has three final exams within three consecutive exam time blocks; 3) the scheduled final exam slot conflicts with an exam at another institution; 4) extenuating circumstances. Travel is not considered a valid excuse for re-scheduling or missing a final exam.

### **Electronic Etiquette**

Students are expected to treat their instructor, guest speakers, and fellow students with respect. It is disruptive to the learning goals of a course or seminar and disrespectful to fellow students and the instructor to use electronics for purposes unrelated to the course during a class session. Turn off all cell phones and other electronic devices during class. Laptops should be used for class-related purposes only. Do not use iPods, MP3 players, or headphones. Do not text, read, or send personal emails, go on Facebook or other social networks, search the internet, or play computer games during class. Some professors will not allow the use of any electronic devises in class. The professor has the right to disallow the student to use a

laptop in future lectures and/or to ask a student to withdraw from the session if s/he does not comply with this policy. Repeat offenders will be directed to the Dean. If you are expecting communication due to an emergency, please speak with the professor before the class begins.

#### **Academic Policies**

It is the responsibility of all students to become familiar with and adhere to academic policies as stated in the Academic Calendar. Personal information (information about an individual that may be used to identify that individual) may be required as part of taking this class. Any information collected will only be used and disclosed for the purpose for which the collection was intended. For further information contact the Privacy Compliance Officer at privacy@ambrose.edu.

#### **Extensions**

Although extensions to coursework in the semester are at the discretion of the instructor, students may not turn in coursework for evaluation after the last day of the scheduled final examination period unless they have received permission for a course Extension from the Registrar's Office. Requests for course extensions or alternative examination time must be submitted to the Registrar's Office by the deadline date; please consult the List of Important Dates. Course extensions are only granted for serious issues that arise "due to circumstances beyond the student's control."

#### **Appeal of Grade**

An appeal for change of grade on any course work must be made to the course instructor within one week of receiving notification of the grade. An appeal for change of final grade must be submitted to the Registrar's Office in writing and providing the basis for appeal within 30 days of receiving notification of the final grade, providing the basis for appeal. A review fee of \$50.00 must accompany the appeal. If the appeal is sustained, the fee will be refunded.

### **Academic Integrity**

We are committed to fostering personal integrity and will not overlook breaches of integrity such as plagiarism and cheating. Academic dishonesty is taken seriously at Ambrose University as it undermines our academic standards and affects the integrity of each member of our learning community. Any attempt to obtain credit for academic work through fraudulent, deceptive, or dishonest means is academic dishonesty. Plagiarism involves presenting someone else's ideas, words, or work as one's own. Plagiarism is fraud and theft, but plagiarism can also occur by accident when a student fails or forgets to acknowledge to another person's ideas or words. Plagiarism and cheating can result in a failing grade for an assignment, for the course, or immediate dismissal from the university. Students are expected to be familiar with the policies in the current Academic Calendar that deal with plagiarism, cheating, and the penalties and procedures for dealing with these matters. All cases of academic dishonesty are reported to the Academic Dean and become part of the student's permanent record.

**Note**: Students are strongly advised to retain this syllabus for their records.